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OUTCOMES OF EVEROLIMUS-ELUTING STENT INCOMPLETE STENT APPOSITION: A SERIAL OPTICAL COHERENCE TOMOGRAPHY ANALYSIS

Poster Contributions
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Background: The mechanism underlying acute acute incomplete stent apposition (ISA) seems to be related with procedural technique, and additional balloon angioplasty is often performed to improve ISA. The natural course of acute ISA after the second-generation everolimus-eluting stent (EES) remains unknown. The aim of the present study was to evaluate the natural course of acute ISA after second-generation EES as compared with first-generation sirolimus -eluting stent (SES) by using optical coherence tomography (OCT).

Methods: From the OCT imaging registry of the RESET trial, we selected 77 patients (EES = 38 and SES = 39) who successfully underwent both post-stenting and 10-month follow-up OCT for inclusion in the present analysis.

Results: ISA was observed in all EESs and SESs at post-stenting, and it was persistent in 23% of EES and 38% of SES at 10-month follow-up. Maximum ISA distance was significantly decreased during follow-up period in both EES (315 ± 94 μm to 110 ± 165 μm, $p < 0.001$) and SES (308 ± 119 μm to 139 ± 194 μm, p 355 μm and > 285 μm, respectively.

Conclusions: The second-generation EES showed the better healing of acute ISA in comparison with the first-generation SES. OCT can predict late-persistent ISA after DES implantation and provide useful information to optimize PCI.